What is claimed is:

1. Apparatus for turning material piled on the ground in a windrow comprising:

a first track assembly and a second track assembly spaced apart from one another and having continuous tracks, each having elongated track axes spaced apart from one another and approximately parallel to one another;

a lift assembly connected between the first and second tracks and comprising an upper end, a lower end, and a belt trained around the upper and lower ends;

the lower end being positioned adjacent the ground and the upper end being positioned in spaced relation above the lower end whereby the belt includes a front belt surface extending upwardly from the lower end to the upper end, and a rear belt surface extending from the upper end to the lower end;

a power source connected to both of the first and second track assemblies for independently driving the first and second track assemblies;

the power source being connected to at least one of the upper and lower ends for causing the at least one end to rotate and cause the front face of the belt to move continuously from the lower end toward the upper end and to cause the rear face of the belt to move continuously from the upper end toward the lower end, whereby the belt will engage the material piled on the ground and carry the material upwardly on the front surface of the belt and then drop the material back onto the ground as the belt passes over the upper end.

2. The apparatus of claim 1 and further comprising a frame member adjacent the upper end and having a first group and a second group of vanes mounted thereon in spaced relation to one another adjacent the upper end for engaging and guiding the material as the belt carries the material over the upper end and drops the material back onto the ground.

3. The apparatus of claim 2 wherein each of the vanes in the first and second groups of vanes have a flat vane surface, the first and second groups of vanes each being independently adjustable to change the direction of the flat vane surfaces so as to direct and guide the material in the desired direction as it passes over the upper end of the lift assembly.

4. The apparatus of claim 1 wherein the upper end includes at least one upper sprocket and the lower end includes at least one lower sprocket, the belt being trained around the upper and lower sprockets, a belt tightening apparatus extending between the upper and lower sprockets and being longitudinally extensible to expand the distance between the upper and lower sprockets and thereby tighten the belt trained around the upper and lower sprockets.

5. The apparatus of claim 4 wherein the belt tightening apparatus comprises a hydraulic cylinder enclosed within a hydraulic cylinder protective housing so as to protect the hydraulic cylinder from coming in contact with the material.

6. In combination:

a windrow of material lying on the ground, the windrow having a width, a height, and a length;

a first track assembly and a second track assembly spaced apart from one another and straddling the windrow, the first and second track assemblies each having a continuous track;

a lift assembly connected between the first and second tracks and comprising an upper end, a lower end, and a belt trained around the upper and lower ends;

the lower end being positioned adjacent the ground and the upper end being positioned in spaced relation above the lower end whereby the belt includes a front surface extending upwardly from the lower end to the upper end, and a rear belt surface extending from the upper end to the lower end;

the belt being in contact with the material lying on the ground;

a power source connected to both of the first and second track assemblies for independently driving the first and second track assemblies;

the power source being connected to at least one of the upper and lower ends for causing the at least one end to rotate and cause the front face of the belt to move continuously from the lower end toward the upper end and to cause the rear face of the belt to move continuously from the upper end toward the lower end, whereby the belt will engage the material piled on the ground and carry the material

upwardly on the front surface of the belt and then drop the material back onto the ground as the belt passes over the upper end.

7. The apparatus of claim 6 and further comprising a frame member adjacent the upper end and having a plurality of vanes mounted thereon in spaced relation to one another adjacent the upper end for engaging and guiding the material as the belt carries the material over the upper end and drops the material back onto the ground.

8. The apparatus of claim 7 wherein the plurality of vanes each have a flat vane surface, the plurality of vanes including first and second groups of vanes that are independently adjustable to change the direction of the flat vane surfaces so as to direct and guide the material in the desired direction.

9. The apparatus of claim 6 wherein the upper end includes at least one upper sprocket and the lower end includes at least one lower sprocket, the belt being trained around the upper and lower sprockets, a belt tightening apparatus extending between the upper and lower sprockets and being longitudinally extensible to expand the distance between the upper and lower sprockets and thereby tighten the belt trained around the upper and lower sprockets.

10. The apparatus of claim 9 wherein the belt tightening apparatus comprises a hydraulic cylinder enclosed within a hydraulic cylinder protective housing so as to protect the hydraulic cylinder from coming in contact with the material.

11. A method for turning a quantity of material resting on the ground, the method comprising:

moving a continuous belt around an upper end and a lower end so that the belt moves along a first surface from the lower end to the upper end and then along a back surface from the upper end to the lower end;

driving a first track connected to one side of the belt and a second track connected to the opposite side of the belt so as to move the moving belt toward the material resting on the ground;

engaging the material on the ground with the moving belt;

carrying the material upwardly on the front surface of the belt from the lower end to the upper end;

dropping the material to the ground as the material passes over the upper end.

12. The method according to claim 11 and further comprising engaging the material after the material passes over the upper end with a plurality of spaced apart vanes, each of which have a vane surface and using the vane surfaces to guide the material as it drops to the ground.

13. The method according to claim 12 and further comprising independently adjusting the position of each the vanes so as to change the direction of guidance provided by the vane surfaces to the material as it drops to the ground.

14. A method for turning a quantity of material contained within a first elongated pit comprising:

positioning a belt assembly within the first elongated pit, the belt assembly having a lower end engaging the material within the first elongated pit, an upper end above the lower end, and a continuous belt trained around the lower and upper ends;

moving the continuous belt so that it progresses from the lower end to the upper end on a front face of the belt, and moves from the upper end to the lower end on a back face of the belt;

lifting the material on the front face of the belt assembly as the belt assembly moves from the lower end of the belt assembly to the upper end of the belt assembly;

depositing the material back in the first pit after the belt assembly has carried the material from the lower end of the belt assembly to the upper end.

15. The method of claim 14 and further comprising moving the belt assembly along the length of the first pit so as to engage and lift all of the material within the first pit.

16. The method of claim 15 and further comprising mounting the belt assembly on an elongated channel mounted above the first pit and extending in a direction parallel to the pit, the step of moving the belt assembly comprising moving the belt assembly along the length of the channel.

17. The method of claim 15 wherein a second elongated pit has a quantity of material therein, the method further comprising moving the belt assembly into the second pit after engaging and lifting all the material in the first pit, engaging the material in the second pit with the lower end of the belt assembly, lifting the material in the second pit upwardly, and depositing the material back into the second pit after the material has reached the upper end of the belt assembly.

18. The method of claim 17 wherein the first and second pits are side by side, and the method comprises moving the belt assembly in a first direction along the length of the first pit, and moving the belt assembly in a second direction opposite from the first direction along the length of the second pit.

19. The method of claim 14 and further comprising holding the belt assembly completely above the material within the first pit, and moving the lower end of the belt assembly downward into contact with the material within the first pit.